

## AMILO Notebook Xa 3530

### The art of entertainment

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Version 4

Pages 6

Experience impressive entertainment, exciting new technologies, inspiring innovations and features unified in the AMILO Notebook X series.

### Key Features

#### Processor technology

- AMD next-generation mobile processor technology

#### Operating System

- Windows Vista® Home Premium

#### Innovation

- ATI Hybrid Graphics technology features multi-GPU performance capabilities, automatic power state adjustment for power-savings, and multi-display functionality with the ATI Mobility Radeon™ HD 3650 graphic card with 512 MB dedicated VRAM
- ATI PowerXpress™ technology that dynamically switches between discrete and onboard graphics. Experience great graphics performance while plugged in or switch over to energy efficient integrated graphics when on-the-go for extended battery life

#### Reliability

- Spill-proof keyboard to protect your notebook against accidentally spilt liquids
  - Enough time to shut down the notebook
  - Have the liquid removed from the notebook
  - Protects your investment and your data
- Engineered in Germany means the test center in Germany tests conformity to international standards and customer-specific requirements
- A+ grade LCD panels for better picture quality

#### Ease of use

- The silent mode function that causes a noticeable reduction in fan noise
- Multimedia LightTouch™ bar and integrated Vista remote control let you easily play, stop or pause your DVDs or music CDs

#### Multimedia and Entertainment

- 17-inch LCD WXGA+ display with BrilliantView technology for vivid colors, amazing sharpness and impressive contrast
- The integrated AMILOcam (1.3 mega pixels) with low-light technology for great video quality even in low-light conditions and the built-in digital array microphone are perfect for Internet telephony (VoIP) and video chats
- Enjoy your favorite Hollywood blockbuster on an external display via HDMI (with HDCP support)

#### Options

- Integrated Blu-ray Disc™ drive and integrated hybrid TV tuner for the ultimate entertainment experience
- Dual hard disk drive with Raid 0/1 function
  - Raid 0 function: implements data striping to provide the best possible performance
  - Raid 1 function: defines disk mirroring for simultaneous writing of data on two disks
  - If one drive becomes defect, all data can be accessed on the second drive

Model: Reveal white



Model: Eclipse black



Fujitsu Siemens Computers recommends Windows Vista® Home Premium

**Operating system<sup>1</sup> and Recovery**

|  |   |
|--|---|
| Operating system                           | Genuine Windows Vista® Home Premium (32-bit version)                                    |
| Fujitsu Siemens Computers Recovery Program | Backup and restore the original status of the hard disk and create system restore disks |
|  | or individual recovery media on CD or DVD are included                                  |

**Product Design**

|       |                               |
|-------|-------------------------------|
| Color | Reveal white or eclipse black |
|-------|-------------------------------|

**Architecture**

|                     |                                 |
|---------------------|---------------------------------|
| System architecture | AMD mobile processor technology |
| Chipset             | AMD 780G + AMD SB700            |

**Processors<sup>1</sup>**

|                                    |  |
|------------------------------------|--|
| AMD Turion™ X2 Ultra processor     | ZM-80 (2.1 GHz, 2 MB L2 cache)<br>ZM-82 (2.2 GHz, 2 MB L2 cache)<br>ZM-84 (2.3 GHz, 2 MB L2 cache)<br>ZM-86 (2.4 GHz, 2 MB L2 cache) |
| AMD Turion™ X2 Dual-Core processor | RM-70 (2.0 GHz, 1 MB L2 cache)<br>RM-72 (2.1 GHz, 1 MB L2 cache)   |
| AMD Athlon™ X2 Dual-Core processor | QL-60 (1.9 GHz, 1 MB L2 cache)<br>QL-62 (2.0 GHz, 1 MB L2 cache)   |

**Memory**

|                                  |  |
|----------------------------------|--|
| Memory speed                     | 2 SO-DIMM memory slots (no memory on board)<br>800 MHz |
| Memory type                      | DDR 2 RAM  |
| Memory modules                   | 1024 or 2048 MB  |
| Max. memory size <sup>1, 2</sup> | 4096 MB  |

**Drives****Hard disk drive**

|                           |   |
|---------------------------|---|
| HDD type                  | SATA  |
| HDD size                  | 2.5-inch  |
| HDD speed                 | 5400 rpm  |
| HDD cache                 | 8 MB  |
| HDD capacity <sup>1</sup> | 250, 320 or 500 <sup>3</sup> GB with single HDD;<br>500 (2x 250), 640 (2x 320) or 1000 <sup>3</sup> (2x 500) GB with dual HDD |

|  |   |
|--|---|
| <b>Raid function</b> (optional, if two HDDs are installed) | Raid 0: stripe set for performance<br>Raid 1: mirroring for security<br>Raid off: two physical HDDs |
|--|---|

**Optical disc drive<sup>1</sup> (built-in)**

|                 |   |
|-----------------|---|
| ODD type        | SATA  |
| ODD technology  | SuperMulti-format DVD burner with double layer (DL) support   |
| ODD read speed  | CD-ROM 24x, DVD-ROM 8x  |
| ODD write speed | CD-R 24x, CD-RW 16x, DVD+R 8x, DVD-R 8x, DVD+RW 8x,<br>DVD-RW 6x, DVD+R DL (8.5 GB) 4x, DVD-R DL (8.5 GB) 4x,<br>DVD-RAM 5x |

**Blu-ray Disc™ (optional)<sup>1</sup>**

|                 |  |
|-----------------|--|
| ODD technology  | Built-in Blu-ray Disc™ drive incl. SuperMulti-format DVD burner with double layer (DL) support                           |
| ODD read speed  | BD 1.6x, CD-ROM 24x, DVD-ROM 8x  |
| ODD write speed | CD-R 8x, CD-RW 8x, DVD+R 8x, DVD+RW 4x, DVD-R 8x, DVD-RW 4x,<br>DVD+R DL (8.5 GB) 2.4x, DVD-R DL (8.5 GB) 2x, DVD RAM 5x |

**Display**

|                             |                      |
|-----------------------------|----------------------|
| Display type                | BrilliantView LCD    |
| Display size                | 17-inch              |
| Display resolution (intern) | 1440 x 900 pixels    |
| Display resolution (extern) | 1920 x 1200          |
| Resolution type             | WXGA+                |
| Reaction time               | 16 ms                |
| Brightness (typ.)           | 200 NIT              |
| Contrast (typ.)             | 400 :1               |
| Compliance with standards   | ISO 13406-2 class II |

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**Graphics**

|                                  |   |
|----------------------------------|---|
| Dedicated graphics (full name)   | ATI Mobility Radeon™ HD 3650 with Hybrid Graphics   |
| Dedicated video memory           | 512 MB GDDR3  |
| Onboard graphics chip            | ATI Radeon™ HD 3200   |
| Shared video memory <sup>4</sup> | Up to 1860 MB depending on installed main memory  |
| 3D Benchmark 2006                | 3600  |
| Graphic features                 | <ul style="list-style-type: none"> <li>■ ATI PowerExpress™ technology (hybrid graphic technology)</li> <li>■ DirectX® 10 support</li> </ul> |

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**Interfaces**

|                                |   |
|--------------------------------|---|
| Video                          | 1x HDMI (1.3a) (incl. HDCP and S/PDIF out), 1x VGA  |
| Audio                          | Front: 1x line in, 1x microphone in, 1x line out /headphone out,<br>Side: 1x line out / S/PDIF out  |
| Network                        | 1x LAN (RJ-45)  |
| Data                           | 1x eSATA combined with USB 2.0, 3x USB 2.0,<br>1x IEEE1394 (FireWire™), 1x CIR<br>1x ExpressCard slot (54 / 34 mm),<br>1x 15-in-1 card reader <sup>5</sup><br>SD, miniSD, MicroSD, SDHC,<br>MS, MS-Duo,<br>MMC, RS-MMC, MMC-Micro,<br>MSPRO, MS-PRO Duo, MS-Pro HG, MS-Pro HG Duo, M2,<br>xD picture card |
| TV tuner (option) <sup>1</sup> | 1x DVB-T / analog antenna in, 1x AV in  |
| Power supply                   | 1x DC-in  |

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**Communication**

|   |   |
|---|---|
| Integrated Bluetooth®                       | 2.1   |
| LAN (Local Area Network)                    | Gigabit Ethernet LAN (10 / 100 / 1000 Mbps)   |
| Built-in WLAN (Wireless Local Area Network) | Yes   |
| WLAN type                                   | draft-n 802.11a/b/g/n   |
| WLAN max. data rate                         | up to 300 Mbps  |
| WLAN encryption                             | WEP, WPA and WPA2   |
| For use in                                  | BE, CH, DK, DE, EE, FI, FR, EL, IE, IS, IT, LI, LV, LT, LU, MT, NL, NO,<br>PL, AT, PT, SE, SK, ES, CZ, HU, UK, CY |

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**Multimedia**

|              |  |
|--------------|--|
| <b>Audio</b> | Support of high-definition audio for S/PDIF output with up to 7.1 channels |
| Audio chip   | Realtek ALC888   |
| Speakers     | 2x built-in speakers (2 W each)  |
| Microphone   | Built-in digital array microphone  |
| Subwoofer    | 1x built-in subwoofer (3 W)  |
| Input device | Sound volume control via function key or via LightTouch™ bar               |

**AMILOcam**

|                   |  |
|-------------------|--|
| Image sensor      | 1.3 mega pixels webcam   |
| Frames per second | 30 <sup>6</sup>  |
| Features          | <ul style="list-style-type: none"> <li>■ Powered by Logitech®</li> <li>■ Auto focus</li> <li>■ Automatic brightness adjustment with status LED (blue: on, red: streaming / application on)</li> <li>■ Low-light technology for great video-quality even in dark surrounding</li> </ul> |

**Hybrid TV tuner (optional<sup>1</sup>)**

|          |   |
|----------|---|
| Standard | Built-in DVB-T / analog hybrid TV tuner |
|----------|---|

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**Input devices / Control buttons**

|                 |   |
|-----------------|---|
| Power button    | Located left of the keyboard  |
| Keyboard        | Spill-proof keyboard with 85 keys, 21 key number block  |
| Touchpad        | Hidden touchpad, with left and right mouse button,<br>touchpad disable function via function key combination (Fn+F6)  |
| Multimedia keys | Multimedia LightTouch™ bar located on top of the keyboard to launch the following applications: <ul style="list-style-type: none"> <li>■ Silent mode (reduce noise level / fan speed, by reducing the CPU performance, office applications, Internet and DVD playback are not affected)</li> <li>■ Hybrid graphics to switch between onboard graphics for extended battery runtime and external graphics for better performance</li> <li>■ DVD playback</li> <li>■ Skip rewind</li> <li>■ Play / pause</li> <li>■ Skip forward</li> <li>■ Volume control</li> </ul> |
| Remote Control  | 26-key Vista remote control, shipped in ExpressCard slot  |

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**Hot keys**

The following hot keys or key combinations are available

- Fn+F1 WLAN / BT on / off
- Fn+F2 TV-tuner on / off
- Fn+F3 Mute on / off
- Fn+F4 Volume down
- Fn+F5 Volume up
- Fn+F6 Touchpad on / off
- Fn+F7 AMILOcam on / off
- Fn+F8 Brightness down
- Fn+F9 Brightness up
- Fn+F10 Display switch
- Fn+F11 Silent mode
- Fn+F12 Suspend

Number block

4 individually configurable quick-start application buttons (A1, A2, A3, A4)

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**Status indicators**

The notebook has 3 status LEDs:

- Power status (& suspend)  
Blue (always on): on; Blue blinking: stand by; None: off
- Battery charge  
Blue (always on): full; Blue blinking: charging;  
Red blinking: < 10 % capacity
- WLAN / Bluetooth  
Blue: on; None: off

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**Security**

|                              |     |
|------------------------------|-----|
| Supervisor and user password | Yes |
| Kensington lock              | Yes |
| Lid switch (hidden)          | Yes |

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**ACPI functions**

ACPI 3.0 compliant for Vista requirement

- Power on stand by (S1 LCD off)
  - Stand by / energy saving mode (S3 save to RAM)
  - Hibernate mode (S4 save to disk)
  - Off mode (S5 soft off)
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**Power System****Battery<sup>7</sup>**

Battery type<sup>1</sup> Lithium-Ion battery  
8 cells, 14.8 V / 2400 mAh (cell) / 4800 mAh (pack)

Battery runtime (idle mode)<sup>8</sup> Up to 3:20 hours (with onboard graphics);  
up to 2:20 hours (with external graphics)

Battery runtime (DVD playback)<sup>9</sup> Up to 2:25 hours (with onboard graphics);  
up to 2:05 hours (with external graphics)

Battery charging time (idle mode)<sup>10</sup> Up to 1:15 hours (with onboard graphics);  
up to 1:25 hours (with external graphics)

Battery charging time (maximum active mode)<sup>11</sup> Up to 1:30 hours (with onboard graphics);  
up to 1:25 hours (with external graphics)

Battery charging time (normal use)<sup>12</sup> Up to 1:30 hours (with onboard graphics);  
up to 1:25 hours (with external graphics)

Battery charging time (off mode) Up to 1:40 hours (with onboard graphics);  
up to 1:45 hours (with external graphics)

**AC Adapter**

Wide Range AC adapter Dynamic charge supported, ACPI 3.0 supported  
Output 110 - 240 V AC, 50 - 60 Hz  
120 W with 20 V DC, 6 A

**Energy consumption**

S0 (idle mode) 18.6 W (with onboard graphics); 23.3 W (with external graphics)

S0 (max. active mode)<sup>13</sup> 52 W (with onboard graphics); 67.6 W (with external graphics)

S3 (stand by / energy saving mode) 0.5 W (with onboard and external graphics)

S4 (hibernate) 0.03 W (with onboard and external graphics)

S5 (off mode) 0.03 W (with onboard and external graphics)

**Noise emission**

Idle mode<sup>14</sup> 24.5 dBA (Silent Mode off); 19.7 dBA (Silent Mode on)

Maximum active mode<sup>15</sup> 28.5 dBA (Silent Mode off); 26.3 dBA (Silent Mode on)

**Operating conditions**

Operational 5 °C to 35 °C (ambient temperature)  
10 % to 90 % relative humidity, non-condensing

**Dimensions and weight**

W x D x H 398 x 295 x 37.0 (front) / 44.0 (back) mm

Weight 3.6 kg<sup>16</sup>

**Certifications**

GOST (WLAN)  
CE Marking  
R&TTE (WLAN, Bluetooth®)

**Warranty**

Country specific terms

**Application Software**

Home office Microsoft® Works  
Microsoft® Office Home and Student Trial  
Adobe Reader  
Windows Mail (within Vista operating system)  
Windows Calendar (within Vista operating system)

Multimedia Nero Essentials S (CD / DVD write software)  
Vista DVD Playback Pack (DVD playback software)  
Windows Media Player (within Vista operating system)  
Windows Media Center (within Windows Vista® Home Premium operating system)  
Logitech® QuickCam® application software

Optional<sup>1</sup>

CyberLink Power DVD (playback software for Blu-ray Disc™, only with Blu-ray Disc™ drive)

Internet Microsoft® Internet Explorer  
Country specific Internet provider

Security Norman security software solution

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**Accessories**

|          |   |
|----------|---|
| Included | AC adapter 120 W<br>First Battery 8 cells<br>Integrated remote control                                      |
| Optional | Find out more: <a href="http://www.fujitsu-siemens.com/accessories">www.fujitsu-siemens.com/accessories</a> |
| Manuals  | Manual (on hard disk), quick start guide, safety guide, warranty guide, recovery guide                      |
| Drivers  | Updates downloadable at <a href="http://www.fujitsu-siemens.com">http://www.fujitsu-siemens.com</a>         |

**Awards**

e-media - Austria - Issue 13/2008  
 "Value for money: 5 of 5 / excellent"



<sup>1</sup> Depending on exact configuration. Please check at your local retailer

<sup>2</sup> DISCLAIMER: Up to 1 GB may not be available with 32-bit operating systems due to system resource requirements if system is preinstalled with 4096 MB RAM.

<sup>3</sup> Available from January 2009

<sup>4</sup> Shared video memory size may vary depending on configuration. Used video memory size depends on Microsoft® Windows Vista® memory management.

- 1024 MB system memory enables up to 638 MB static and shared memory  
 - 2048 MB system memory enables up to 1150 MB static and shared memory.  
 - 3072 MB system memory enables up to 1390 MB static and shared memory.  
 - 4096 MB system memory enables up to 1860 MB static and shared memory.

<sup>5</sup> An adapter is needed for the following card formats: RS-MMC, MMC-Micro, miniSD, MicroSD, SDHC, MS-Duo, MS-PRO Duo, MS-Pro HG, MS-Pro HG Duo, M2

<sup>6</sup> AMILOcam frame rate can vary significantly depending on the used software application.

<sup>7</sup> DISCLAIMER: Battery life may vary depending on product model, configuration, applications, power management settings and features utilized. Recharge time varies depending on usage. The recharge capacity may decrease after some months so that the battery lifetime as well as operating time can not be assured for the whole lifetime of the notebook.

<sup>8</sup> Tested with Battery Mark 4.0.1 ("power saver mode")

<sup>9</sup> DVD playback tested with Vista DVD playback

<sup>10</sup> Tested with Battery Mark 4.0.1

<sup>11</sup> Tested with 3DMark 2006

<sup>12</sup> DVD playback tested with Vista DVD playback

<sup>13</sup> Tested with 3DMark 2006

<sup>14</sup> Tested according to ISO 7779 and ISO 9296

<sup>15</sup> Tested with QAFE 8.01 / 2. sieve.exe (CPU stress test) / Diskload.exe according to ISO 7779 and ISO 9296

<sup>16</sup> Weight may vary depending on actual configuration.

**The configuration described in this document is generic only and non-binding. For the exact configuration of your AMILO, please contact your licensed dealer.**